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Clarification on the meaning of 'verification' under ETV and differences from certification

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Abstract
Environmental Technology Verification (ETV) is a new tool enabling the verification of the performance claims put forward by developers of innovative environmental technologies. The EU-ETV programme, launched in 2011 by DG-ENV, is supported by Technical Working Groups (TWGs), one for each technology area active under the Pilot programme. These TWGs are chaired by the JRC and composed by Commission Invited Experts and by Experts representing the Verification Bodies with the overall aim to harmonise and exchange good practices.

Technology performance verification is relatively a new concept and the distinction between verification and certification can be confusing for technology proposers, end users and accreditation bodies. The present reference document summarises the key differences and should provide clarification to all parties concerned with ETV.

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[1] We also than experts who have contributed to the document but have left the Technical Working Groups before the approval.

1 Context

Environmental Technology Verification (ETV) is a tool to help innovative environmental technologies reach the market. It is a voluntary initiative in which performance claims are presented for verification using existing quality data or through new testing. There is an emphasis on environmental added value in comparison to alternative technologies.

The EU ETV programme, run by the European Commission on a pilot basis, is implemented by Verification Bodies (VBs) specifically accredited for ETV. All verifications made within the programme follow the same process and have the same value. VBs are coordinated by thematic Technical Working Groups (TWGs), which provide guidance on the implementation of ETV and ensure adequate harmonisation of practices.

2 Introduction

Independent third party verification of performance claims put forward by a technology owner is the core of ETV. The claims are central to the verification and will likely be revised during the process until finally expressed in the Statement of Verification if successfully verified.

The experience of the pilot phase has been that clarification is required on the differences between verification and certification. The technical reference defining ETV procedures and requirements is the General Verification Protocol (GVP)[2]. Section A.I of the GVP makes reference to certification:

> *"In addition, companies willing to prove the compliance of their technology with a product standard are directed to **product certification**, as defined by the ISO/IEC Standard 17065 and implemented by certification bodies accredited to fulfil the requirements of this standard"*

The key aspect is that ETV is recommended for technologies whose innovative features or technical and/or environmental performance are not fully reflected in existing **product standards**. Harmonisation of Specific Verification Protocols for appropriate groups of technologies may ultimately contribute to the development of new standards by which the performance of such technologies could be assessed.

In the context of ETV the situation may be summarised thus:

- **Certification** confirms whether products meet **specified standards** normally established by independent organisations (e.g. a standards body such as CEN)
- **Verification** is the process of **independently validating performance claims** put forward by the owner of the technology.

[2] Available to download from http://iet.jrc.ec.europa.eu/etv/reference-documents (accessed 03/02/2016)

It is essential that this distinction be recognised by all parties including proposers, VBs (and the bodies providing their accreditation) as well as end users of verified technologies. A key similarity between verification and certification is that both are only applicable under the specified conditions. It is useful to note that verification does not imply conformity assessment is taking place. Certification along with inspection are ongoing aspects of what is termed conformity assessment.

3 Significant differences between verification and certification

- ETV includes independent confirmation of tested and quantified performance claims whereas certification is generally issued according to compliance with pass/fail criteria included in the relevant standard[3];
- Verifications are not exhaustive and include those operational, environmental and additional parameters considered relevant and agreed by the technology developer and the verification body, but it cannot be guaranteed that all possible parameters have been considered. The parameters for certification, against which compliance is assessed, are fixed and defined by an independent organisation (e.g. a standards body such as CEN) according to the standard against which certification is assessed;
- The verification statement provided in the Statement of Verification is based on a 'snapshot' of the technology performance. There is no regular third-party surveillance in the ETV scheme to confirm that the technology continues to meet the performance claim(s) in the statement of verification. Certification requires that changes to the certificated technology be reported in advance to the certification body so that checks can be made to ensure the product continues to meet the requirements for certification. In ETV it is the owner of a technology that is responsible for ensuring that the verified technology conforms to the published Statement of Verification and for taking action in light of any changes to the technology with respect to meeting the verified performance claims;
- Unlike certification, in ETV, on-going consistency of the manufacturing process is not verified;

4 Conclusion

The distinction between verification and certification can be confusing for technology proposers, end users and accreditation bodies. This document has summarised the key differences and should provide clarification to all parties concerned with ETV.

[3] This is not always the case, however, as some standards (eg EN 14825:2013) define a methodology for quantifying the performance of a product.

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